

### **CIVIL WORKS**

# TECHNICAL ASSISTANCE, PROJECT IMPLEMENTATION, REGULATORY, AND EMERGENCY MANAGEMENT PROGRAMS









#### INTRODUCTION

The U.S. Army Corps of Engineers (Corps) is the world's largest public engineering agency, and we have three major missions.

- Under our CIVIL WORKS mission, we not only build flood control reservoirs, flood walls, levees, navigation locks and dams, etc., we also design and implement non-structural flood damage reduction and ecosystem restoration projects.
- Under our MILITARY CONSTRUCTION mission, we support the Department of Defense with engineering and construction services.
- Under our ENVIRONMENTAL REMEDIATION mission, we protect the environment by cleaning up hazardous, toxic, and radioactive waste sites.

This brochure focuses entirely on the Civil Works Program of the Corps' Omaha District. The Omaha District has broad civil works responsibilities for flood damage reduction, hydroelectric power generation, and navigation improvement as well as for other water and related land resources problems and needs, including ecosystem restoration, recreation, and comprehensive flood plain management.

The Omaha District provides quality expertise in the areas of Engineering, Construction, Operations, Planning, Real Estate, and Project Management. The District covers all or part of 10 States, encompassing 700,000 square miles. The Omaha District employs some 1,300 full-time workers and up to 100 students and interns. Within the Civil Works mission, we operate or maintain 27 flood control reservoirs. These dams and reservoirs provide flood control, hydropower, recreation, and navigation and enhance water quality and supply. The District has and is currently in the process of designing and constructing a multitude of projects involving flood damage reduction, ecosystem restoration, and hydropower. The terrain within the Omaha District varies greatly—from the Rocky Mountains and semiarid plains to prime farmland and urban areas.

Under existing authorities, the Corps is authorized to provide technical assistance to local communities, States, and federally recognized Indian Tribes in support of their efforts to alleviate flooding impacts, reduce erosion, and otherwise plan for the wise and prudent use of the Nation's water and related land resources. The District also has authority to construct certain water resources-related projects without specific congressional approval if the projects meet certain criteria previously established by Congress. Projects that do not meet the criteria for the above programs require specific authorization and appropriation of funds by Congress.

The following pages describe the assistance available under the Omaha District's Technical Assistance, Project Implementation, Regulatory, and Emergency Management Programs. Also included is information on the technical expertise the Omaha District has in the specific areas of Planning, Hydrologic Engineering, Geotechnical Engineering, and Design Engineering, which are the major components of any work under the Civil Works program.

For additional information concerning programs or areas of expertise described in this brochure, please contact the respective individuals listed below.

Ken Cooper Deputy District Engineer	kenneth.s.cooper@usace.army.mil	402-221-3928
Debra Brey Director, Business Development/ Outreach	debra.k.brey@usace.army.mil	402-221-7715
Bill Mulligan Chief, Civil Works Branch	william.d.mulligan@usace.army.mil	402-221-7184
Ralph Roza Chief, Planning Branch	ralph.r.roza@usace.army.mil	402-221-4574
Dave Brandon Chief, Plan Formulation Section	david.a.brandon@usace.army.mil	402-221-4889
Jack Rose Chief, Readiness Branch	jack.d.rose@usace.army.mil	402-221-4148
Katie Schenk Chief, Regulatory Branch	kathryn.m.schenk@usace.army.mil	402-221-4211
Bob Roumph Chief, Engineering Division	robert.f.roumph@usace.army.mil	402-221-4401
Larry Buss Chief, Hydrologic Eng. Branch	larry.s.buss@usace.army.mil	402-221-4417
Randy Behm Chief, Flood Plain Management Services Section	randall.l.behm@usace.army.mil	402-221-4596
Jack Monzingo Chief, Geotechnical Eng. Branch	john.w.monzingo@usace.army.mil	402-221-4481
John Trout Chief, Design Branch	john.e.trout@usace.army.mil	402-221-4437

# CIVIL WORKS TECHNICAL ASSISTANCE, PROJECT IMPLEMENTATION, REGULATORY, AND EMERGENCY MANAGEMENT PROGRAMS

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# PLANNING ASSISTANCE TO STATES (Section 22)

<u>PURPOSE</u>: To cooperate with States, public entities within States, and federally recognized Indian Tribes in the preparation of plans for the development, utilization, and conservation of water and related land resources.

<u>DESCRIPTION</u>: Under this program, the Corps can provide technical planning assistance in all areas related to water resources development in which the Corps has expertise. These areas include, but are not necessarily limited to, the following:

Flood damage reduction Hydrologic analysis
Bank stabilization Hydraulic analysis
Sedimentation Hydropower

Dredging Flood hazard mitigation
Navigation Environmental preservation

Hazardous, toxic, and and enhancement radioactive wastes

Water conservation

and enhancement Fish and wildlife Cultural resources

Water quality Flood plain information Surface water Ecosystem and watershed

Ground water planning

Recreation Streambed degradation

<u>LIMITATIONS</u>: Assistance is limited to \$500,000 in Federal funds per State or Tribe per year, based on available appropriations. The assistance (study) is reconnaissance level in detail. Most studies are completed within 12 months.

<u>COST</u>: Studies are cost-shared on a 50-50 basis with one (or more) non-Federal sponsor (a State, a public entity within a State, or an Indian Tribe).

AUTHORITY: Section 22 of the Water Resources Development Act of 1974, as amended.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889 or John Palensky, Section 22 Program Manager, at (402) 221-4584.

#### TECHNICAL ASSISTANCE

#### FLOOD PLAIN MANAGEMENT SERVICES

<u>PURPOSE</u>: To provide a full range of information, technical services, and planning guidance needed to support and promote effective flood plain management.

<u>DESCRIPTION</u>: The Corps can provide the following:

#### TECHNICAL SERVICES/PLANNING ASSISTANCE

Flood and flood plain data are developed and interpreted. This includes information on flood hazard mitigation, flood proofing, flood formation and timing, flood depth or stage, flood water velocity, extent of flooding, duration of flooding, flood frequency, obstruction to floodflows (including ice jams), regulatory floodways, flood loss potential before and after employment of flood plain management measures, and comprehensive flood plain management planning. On a larger scale, the program provides assistance and guidance in the form of "Special Studies" on all aspects of flood plain management planning.

Some of the most common types of Special Studies include the following:

Flood plain delineation/
flood hazard evaluation
Dam break analysis
Flood warning/preparedness
studies
Regulatory floodway studies
Comprehensive flood plain
management studies
Flood mitigation studies

Flood damage reduction studies Urbanization impact studies Stormwater management studies Flood proofing studies Inventory of flood-prone structures Nonstructural flood damage reduction studies

#### GUIDES AND PAMPHLETS

Guides and pamphlets associated with flood plain management can be developed and/or supplied.

<u>COST</u>: All program services provided to State, regional, or local governments or other non-Federal public agencies are free of charge, within program funding limits. Program services can also be provided with 100 percent of the funds coming from the requesting entity. Federal agencies and private entities are required to provide funds to cover 100 percent of the cost of services provided.

<u>AUTHORITY</u>: Section 206 of the Flood Control Act of 1960, as amended.

For additional information or to request assistance under this program, please contact Randy Behm, Chief, Flood Plain Management Services Section, at (402) 221-4596.

# RESTORATION OF ABANDONED MINE SITES (RAMS) (Section 560)

<u>PURPOSE</u>: To provide technical planning and design assistance to Federal and non-Federal interests for carrying out projects to address water quality problems caused by drainage and related activities from abandoned and inactive noncoal mines. Also to provide assistance to non-Federal and nonprofit entities to develop, manage, and maintain a database of technologies for reclamation of abandoned and inactive noncoal mine sites.

<u>DESCRIPTION</u>: Assistance may be provided under the RAMS program in support of a Federal or non-Federal project for the following purposes:

- (1) Response, control, and remediation of hazardous, toxic, and radioactive waste and improvement of the quality of the environment associated with abandoned or inactive noncoal mines.
- (2) Restoration and protection of streams, rivers, wetlands, groundwater sources, and other waterbodies and all ecosystems, including terrestrial ecosystems degraded, or with the potential to become degraded, from abandoned or inactive noncoal mines.
- (3) Demonstration and implementation of treatment technologies, including innovative and alternative technologies, to minimize or eliminate adverse environmental effects associated with abandoned or inactive noncoal mines.
- (4) Demonstration and implementation of management practices to address environmental effects associated with abandoned or inactive noncoal mines.
- (5) Remediation and restoration of abandoned or inactive noncoal mine sites for public health or safety purposes.
- (6) Expedition of the remediation or restoration of abandoned or inactive noncoal mines to minimize adverse impacts to the environment.

<u>PROCESS</u>: Cost-sharing with sponsors is authorized for both Federal and non-Federal agencies. The Federal share of the cost of a project carried out under this program is 50 percent, except for any project located on Federal lands, in which case, the Federal share is 100 percent of the costs. The Corps' share will be determined through negotiation with the other Federal agency.

AUTHORITY: Section 560 of the Water Resources Development Act of 1999.

For additional information or to request assistance under this program, please contact Bill Mulligan, Chief, Civil Works Branch, at (402) 221-7184 or Deb Kobler, RAMS Program Manager, at (402) 221-4897.

### FLOOD DAMAGE REDUCTION PROJECTS (Section 205)

<u>PURPOSE</u>: To construct projects (structural or nonstructural) to reduce damages caused by flooding. This program focuses on solving local flood problems in urban areas, towns, and villages.

<u>DESCRIPTION</u>: Examples of structural projects are levees, channels, small dams, and floodwalls. Examples of nonstructural projects include flood plain parks, flood warning systems, flood proofing, and relocation of flood-prone development. The Corps works with the project sponsor to (1) define the flood problem, (2) evaluate solutions, (3) select a plan, (4) develop the design, and (5) construct a project.

#### PROCESS:

#### FEASIBILITY STUDY

The Corps, along with a non-Federal sponsor, conducts a feasibility study to identify potentially feasible projects and to determine whether the Federal Government and the non-Federal sponsor should construct a structural or a nonstructural project. The first \$100,000 of the feasibility study cost is 100 percent Federal; any costs over \$100,000 are cost-shared 50-50 with the sponsor--in the form of cash and in-kind services.

#### *IMPLEMENTATION*

<u>Structural Projects</u>: The non-Federal sponsor provides 5 percent of the project cost in cash and also provides any needed lands, easements, rights-of-way, relocations, and disposal sites (LERRDs). If these items equal less than 35 percent of the total project cost, the cash contribution must be increased to make up the difference. The contribution of the non-Federal sponsor is currently limited to a maximum of 50 percent of the total project cost. After construction is complete, operation and maintenance is the responsibility of the non-Federal sponsor.

<u>Nonstructural Projects</u>: The cost-share requirement is the same as for structural projects, with the exception that the non-Federal share is minimized and maximized at 35 percent.

Some States have programs to help local communities with their share of cost-shared study and construction costs. The Federal investment in the solution is limited to a maximum of \$7 million per project.

AUTHORITY: Section 205 of the Flood Control Act of 1948, as amended.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889 or Nelson Carpenter, Section 205 Program Manager, at (402) 221-4450.

# EMERGENCY STREAMBANK AND SHORELINE PROTECTION (Section 14)

<u>PURPOSE</u>: To construct emergency streambank and shoreline protection to prevent erosion from damaging highways, bridges, roads, streets, utilities (including water and sewage treatment plants), public buildings, hospitals, churches, schools, parks, and other nonprofit public facilities.

<u>DESCRIPTION</u>: The Corps works with the project sponsor to (1) define the problem, (2) evaluate solutions, (3) select a plan, (4) develop the design, and (5) construct a project.

#### PROCESS:

#### FEASIBILITY STUDY

If a public facility is in imminent danger of failure, the Corps can conduct a study to analyze the problem, develop the solution to solve the problem, and determine the feasibility of erosion protection. The cost of the feasibility study is paid by the Federal Government.

#### **IMPLEMENTATION**

If a feasible solution is found, the Corps, along with the non-Federal sponsor, proceeds to construction. The non-Federal sponsor provides at least 5 percent of the project cost in cash and also provides any needed lands, easements, rights-of-way, relocations, and disposal sites (LERRDs). If these items equal less than 35 percent of the total project cost, the cash contribution must be increased to make up the difference. The contribution of the non-Federal sponsor is limited to a maximum of 50 percent of the project costs. After construction, operation and maintenance is the responsibility of the non-Federal sponsor.

The Federal investment in the solution is limited to a maximum of \$1 million per project.

AUTHORITY: Section 14 of the Flood Control Act of 1946, as amended.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889 or Laura Timp, Section 14 Program Manager, at (402) 221-4627.

# CHANNEL CLEARING FOR FLOOD CONTROL (Section 208)

<u>PURPOSE</u>: To clear stream channels to increase channel flow capacity, decrease flooding, and reduce damage from debris carried by floodflows.

<u>DESCRIPTION</u>: Work can include channel clearing of accumulated snags and debris and limited excavation. Embankment construction is limited to the use of the material excavated from the channel. The Corps works with the non-Federal sponsor to (1) define the flood problem, (2) evaluate the effectiveness of channel clearing alternatives, (3) select a plan, (4) develop the design, and (5) construct a project.

#### PROCESS:

#### FEASIBILITY STUDY

The Corps, along with a non-Federal sponsor, conducts a study to identify potentially feasible projects and to determine whether the Federal Government and the non-Federal sponsor should construct a structural or a nonstructural project. The first \$100,000 of the feasibility study cost is 100 percent Federal; any costs over \$100,000 are cost-shared 50-50 with the sponsor--in the form of cash and in-kind services.

#### *IMPLEMENTATION*

If it is decided to proceed with construction, the non-Federal sponsor provides 5 percent of the project cost in cash and also provides any needed lands, easements, rights-of-way, relocations, and disposal sites (LERRDs). If these items equal less than 35 percent of the total project cost, the cash contribution must be increased to make up the difference. The contribution of the non-Federal sponsor is limited to a maximum of 50 percent of the total project cost. After construction, operation and maintenance is the responsibility of the non-Federal sponsor.

Some States have programs to help local communities with their share of cost-shared study and construction costs. The Federal investment in the solution is limited to a maximum of \$500,000 per project.

<u>AUTHORITY</u>: Section 208 of the Flood Control Act of 1954, as amended.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889.

# SMALL MARINA AND NAVIGATION PROJECTS (Section 107)

<u>PURPOSE</u>: To construct small projects to improve navigation. Typical projects in the Missouri River basin include constructing small boat harbors, marinas, and navigational aids and dredging entrance channels.

<u>DESCRIPTION</u>: The Corps works with the non-Federal sponsor to (1) define the navigation problems, (2) evaluate solutions, (3) select a plan, (4) develop the design, and (5) construct the project.

#### **PROCESS**:

#### FEASIBILITY STUDY

The Corps, along with a non-Federal sponsor, conducts a feasibility study to identify potentially feasible projects and to determine whether the Federal Government and the non-Federal sponsor should construct a structural or a nonstructural project. The first \$100,000 of the feasibility study cost is 100 percent Federal; any costs over \$100,000 are cost-shared 50-50 with the sponsor--in the form of cash and in-kind services.

#### **IMPLEMENTATION**

The non-Federal sponsor provides any needed lands, easements, rights-of-way, relocations, and disposal sites (LERRDs) plus 20 percent of the cost of general navigation features and 50 percent of the cost of recreation features. The non-Federal share for general navigation features (breakwaters, jetties, and the entrance channel) includes 10 percent cash during construction, with an additional 10 percent cash over 30 years. LERRD costs can be deducted from the second 10-percent payment. Recreation features include the joint general navigation features allocated to recreation, as well as marina buildings, berths, etc. The Federal Government provides initial operation and maintenance (O&M) of the general navigation features, but, ultimately, non-Federal interests become responsible for all O&M.

Some States have programs to help local communities with their share of cost-shared study and construction costs. The maximum Federal investment in a plan is \$4 million per project.

<u>AUTHORITY</u>: Section 107 of the River and Harbor Act of 1960, as amended.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889.

# PROJECT MODIFICATIONS FOR IMPROVEMENT OF ENVIRONMENT (Section 1135)

<u>PURPOSE</u>: To modify the structures or operations of previously constructed Corps water resources projects to improve the quality of the environment in the public interest.

<u>DESCRIPTION</u>: The types of work that can be accomplished under this program are structural or operational changes to existing projects for restoration or enhancement of environmental values, especially fish and wildlife values. Any modifications for environmental improvement must be both feasible and consistent with the authorized project purposes. The Corps coordinates with the appropriate Federal, State, and local agencies on any actions taken.

#### PROCESS:

#### **FEASIBILITY**

If a non-Federal sponsor is interested in cost-sharing a project, the Corps will prepare a study proposal at 100 percent Federal cost. If the study proposal is approved, the subsequent costs for the feasibility study, plans and specifications, and construction are cost-shared. The sponsor's share is 25 percent of these costs but is not payable unless and until the project enters the construction phase. In-kind services provided during design or construction can be credited toward a sponsor's share. Sponsors are usually public agencies; however, Indian Tribes and national nonprofit organizations such as Ducks Unlimited and the National Wildlife Federation may also qualify as sponsors. A private interest may qualify as a non-Federal sponsor if the proposed modifications do not require future operation and maintenance.

#### *IMPLEMENTATION*

A sponsor must provide all lands, easements, rights-of-way, relocations, and disposal sites (LERRDs) for required implementation of the proposed modifications. Costs to acquire the LERRDs are credited toward the sponsor's 25-percent share of total costs. The sponsor is responsible for all operation, maintenance, repair, rehabilitation, and replacement required for the project modifications, although, by subagreement, a third party can perform these responsibilities for the sponsor. Modification costs cannot exceed \$5 million (Federal costs) per project unless specifically approved by Corps Headquarters. No minimum cost per project has been established; however, the design costs should not exceed the costs of the project modifications.

<u>AUTHORITY</u>: Section 1135 of the Water Resources Development Act of 1986, as amended.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889 or Steve Rothe, Section 1135 Program Manager, at (402) 221-4579.

## **AQUATIC ECOSYSTEM RESTORATION** (Section 206)

<u>PURPOSE</u>: To restore historic habitat conditions (aquatic ecosystems) at any location to benefit fish and wildlife resources.

<u>DESCRIPTION</u>: The types of work that can be accomplished under this program are structural or operational changes to improve the environment, such as reconnecting old river channels and backwaters, creating wetland subimpoundments on the perimeters of reservoirs, improving water quality through the reduction of erosion and sedimentation, manipulating wetlands and vegetation in shallow headwaters of reservoirs, and planting woody vegetation in flood plains.

#### PROCESS:

#### **FEASIBILITY**

If a non-Federal sponsor is interested in cost-sharing a project, the Corps will prepare a study proposal at 100 percent Federal cost. If the study proposal is approved, the subsequent costs for the feasibility study, plans and specifications, and construction are cost-shared. The sponsor's share is 35 percent of these costs but is not payable unless and until the project enters the construction phase. In-kind services provided during design or construction can be credited toward a sponsor's share. Sponsors are usually public agencies; however, Indian Tribes and national nonprofit organizations such as Ducks Unlimited and the National Wildlife Federation may also qualify as sponsors. A private interest may qualify as a non-Federal sponsor if the proposed modifications do not require future operation and maintenance.

#### **IMPLEMENTATION**

A sponsor must provide all lands, easements, rights-of-way, relocations, and disposal sites (LERRD's) for required implementation of the proposed modifications. Costs to acquire the LERRD's are credited toward the sponsor's 35-percent share of total costs. The sponsor is responsible for all operation, maintenance, repair, rehabilitation, and replacement required for the project modifications, although, by subagreement, a third party can perform these responsibilities for the sponsor. Modification costs cannot exceed \$5 million (Federal costs) per project unless specifically approved by Corps Headquarters. No minimum cost per project has been established; however, the planning and design costs should not exceed the costs of the project modifications.

<u>AUTHORITY</u>: Section 206 of the Water Resources Development Act of 1996.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889 or Steve Rothe, Section 206 Program Manager, at (402) 221-4579.

### WATER RESOURCES PROJECTS (General Investigations Program)

<u>PURPOSE</u>: To construct larger projects to reduce flood damages or to restore the environment and to provide Corps assistance in resolving more complex flood-related water resources problems. This program includes projects ranging from those that solve costly flood problems for a single community to those that solve more complex flooding problems involving multiple communities or large agricultural areas. This program can be used to evaluate multipurpose projects that can include flood damage reduction, water supply, ecosystem restoration, sedimentation reduction, cultural resources preservation, recreation, or other purposes.

<u>DESCRIPTION</u>: Examples of projects developed under this program are reservoirs, diversions, levees, channels, floodwalls, pump stations, and nonstructural measures such as flood plain parks, flood warning systems, flood proofing, and the relocation of flood-prone development. The Corps works with the project sponsor to (1) define the problem and related water resources opportunities, (2) evaluate flood control or multipurpose solutions, (3) select a plan, (4) develop the design, and (5) construct a project.

#### PROCESS:

#### STUDY AUTHORIZATION AND CONGRESSIONAL FUNDING

Studies require specific authorization and funding from Congress. The Corps and your Congressman or Senator work together to prepare a study resolution, which, when approved by Congress, provides the authorization for the study. The Corps and the non-Federal study sponsors work together to define the scope of the study. If approved, the study is then included in a request for funding to Congress.

#### RECONNAISSANCE STUDY/FEASIBILITY STUDY

The reconnaissance study determines if there is at least one potentially feasible solution to the identified water resources problem. The \$100,000 cost of the reconnaissance study is paid by the Federal Government. If a feasible solution is found during the reconnaissance study, the Corps, along with a non-Federal sponsor, conducts a feasibility study (1) to further evaluate the plan identified in the reconnaissance study and any other potentially feasible solutions and (2) to determine whether the Federal Government and the non-Federal sponsor should construct the project. Fifty percent of the cost of the feasibility study is paid by the non-Federal sponsor in the form of cash and in-kind services.

#### **IMPLEMENTATION**

The feasibility study is submitted to Congress for authorization of construction. Normal implementation consists of the non-Federal share of the implementation costs varying between a minimum of 35 percent and a maximum of 50 percent. The sponsor is responsible for all operation, maintenance, repair, rehabilitation, and replacement required for the project.

For additional information or to request assistance under this program, please contact Dave Brandon, Chief, Plan Formulation Section, at (402) 221-4889.

#### REGULATORY AUTHORITIES/RESPONSIBILITIES

<u>GENERAL</u>: The Corps of Engineers has regulatory authority under two laws, the Clean Water Act and the River and Harbor Act of 1899. The purpose of these laws, and the intent of the Corps' Regulatory Program, is to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material and to protect the navigable capacity of our Nation's waters.

SECTION 404 OF THE CLEAN WATER ACT: This law regulates the discharge of dredged or fill material into waters (including adjacent wetlands) of the United States. The landward regulatory limit is the ordinary high-water mark. Typical Section 404 activities include road-fills and causeways, where portions of the construction are in waters of the United States; dams and dikes; protection devices such as levees, groins, riprap, and other bank stabilization measures; and site development fill as part of residential, commercial, industrial, or recreational construction.

<u>SECTION 10 OF THE RIVER AND HARBOR ACT OF 1899</u>: This law covers any structure that is placed in, on, or under a designated navigable waterway. Typical Section 10 activities include boat docks, mooring facilities, intakes, overhead power lines, buried utility transmission lines, and dredging.

CORPS OF ENGINEERS PERMITS: The Corps issues three kinds of Department of the Army permits: individual permits, regional general permits, and nationwide general permits. You are encouraged to contact the Corps of Engineers for proposed work in waters in your area. Exemptions and nationwide, regional, and individual permit requirements will be reviewed. By discussing all information prior to application submittal, your application will be processed more efficiently. An official determination as to the need for a Department of the Army permit will be provided upon request. Permits from the Corps should be acquired prior to undertaking any work in or near a river, stream, or wetland.

#### NATIONWIDE AND REGIONAL GENERAL PERMITS

These two permit authorizations are for projects that have minimal environmental impacts. Normally, these permit actions are processed in a fairly short time. Examples of nationwide permit activities include minor bank stabilization activities; minor road crossings; discharges of fill material which are less than 10 cubic yards; repair, rehabilitation, or replacement of existing structures; utility crossings; and discharges of dredged or fill materials into non-tidal waters upstream from their headwaters. Examples of activities that would fall under regional general permits include both temporary and permanent fills placed in conjunction with roadway crossings and fill placed in conjunction with fishery habitat improvement structures.

# REGULATORY AUTHORITIES/RESPONSIBILITIES (Continued)

#### **INDIVIDUAL PERMITS**

An individual permit is required when a project is not exempted from regulation and is of such a scope or magnitude that it does not fall under one of the nationwide or regional general permits. Processing of an individual permit application involves circulation of a public notice to Federal, State, and local agencies; individuals; and organized groups for review. The public notice is the primary method of advising interested parties of a proposed activity and soliciting comments necessary to evaluate the probable impacts of that activity. During the public notice comment period (usually 30 days), a public hearing may be requested. If it is determined that a public hearing would provide additional information necessary for the public interest review of the project, a hearing will be held. Finally, a determination is made as to whether the project is in the public interest, and the permit is either denied or issued. Oftentimes during the course of the public interest review, the proposed work is either modified or mitigative measures are agreed upon to bring the project into the public interest. To minimize delays in permit decisions, applicants should contact agencies, individuals, or organized groups that may have some concerns with the proposed project early in the planning process.

<u>CORPS EVALUATION CRITERIA</u>: The following policies are applicable to the review of all applications for Department of the Army permits. Additional policies specifically applicable to certain types of activities are identified in 33 CFR Parts 321-324.

- (a) Public interest review
- (b) Effects on wetlands
- (c) Fish and wildlife
- (d) Water quality
- (e) Historic, cultural, scenic, and recreation values
- (f) Effects on limits of the territorial sea
- (g) Consideration of property ownership
- (h) Other Federal, State, or local requirements

- (i) Safety of impoundment structures
- (j) Flood plain management
- (k)Water supply and conservation
- (1) Energy conservation and development
- (m) Navigation
- (n) Environmental benefits
- (o) Economics
- (p) Mitigation

The Corps' decision to issue or deny a permit is based on the benefits that may result from the proposed activity. These benefits are weighed against any foreseeable adverse impacts. Permits are denied only if an activity is determined to be contrary to the public interest.

For additional information about the Corps' Regulatory Program, including the locations and phone numbers of the various regulatory field offices within the Omaha District, please contact Katie Schenk, Chief, Regulatory Branch, at (402) 221-4211.

#### **EMERGENCY MANAGEMENT**

PURPOSE: To permit an effective response in times of natural disasters.

#### FLOOD EMERGENCIES:

#### DISASTER PREPAREDNESS

Preparedness prior to a disaster is essential for providing an effective emergency response. The Corps engages in disaster preparedness activities to ensure its readiness to respond to emer-

gency incidents. These activities include maintaining a system of fully qualified and trained personnel, resources, emergency policies, and operational plans and procedures. These preparedness efforts are federally funded and are coordinated with other Federal, State, and local agencies to ensure a uniform multiagency response to emergencies. This program includes the following:

Coordination with State and local officials
Emergency publications
Exercises and training
Inspection of non-Federal flood control works
Maintenance of supplies and equipment for emergency response



#### **EMERGENCY OPERATIONS**

During actual flood conditions, emergency operations will be undertaken by the Corps to supplement State and local efforts. These operations will be implemented when State and local resources are in danger of being exhausted or when time necessitates immediate supplemental assistance to prevent extensive property damage or loss of life. A declaration of a state of emergency or a written request by the Governor of a State (or his/her authorized representative) is desirable to receive federally funded Corps support. Under urgent conditions, telephone re-

quests from State authorities will be sufficient to receive Corps assistance. The following activities are included in this program:

Field investigations, collection of data, and monitoring of natural disasters and flood emergency operations, such as providing the following:

#### EMERGENCY MANAGEMENT

# EMERGENCY MANAGEMENT (Continued)

- Technical assistance
- Flood-fighting materials
- Direct flood-fight operations
- Flood search and rescue operations
- Emergency contracting
- Snagging and clearing

#### REHABILITATION ACTIVITIES

Rehabilitation activities consist of the repair or restoration of any eligible flood-damaged flood control project to ensure the structure's soundness and continued function. This work is limited to providing the same degree of flood protection that was provided by the original structure. If improvements to the original structure are desired, these improvements must be accomplished at non-Federal cost. Additionally, the repair must be economically feasible and the project must meet design and maintenance standards established by the Corps to be eligible for Corps assistance.

Requests for rehabilitation assistance can be accepted only from eligible public sponsors. The minimum project cost is currently \$1,000. The request must be made within 30 days of a flood event. The project is cost-shared (20 percent from the sponsors and 80 percent from the Federal Government).

#### EMERGENCY WATER SUPPLY AND DROUGHT ASSISTANCE

<u>Emergency Water Supply</u>. The Corps can provide emergency supplies of clean drinking water at Federal expense to any locality with a source of contaminated drinking water that is a substantial threat to health and welfare. If the Governor signs a request for assistance, the State disaster services organization and the Corps will coordinate their efforts. The Corps will respond after State and local agencies have made full use of their own resources.

<u>Drought Assistance</u>. The Corps, under certain statutory conditions, has authority to construct wells and to transport water to ranchers, farmers, and political subdivisions within areas determined by the Assistant Secretary of the Army for Civil Works (ASA(CW)) to be drought distressed. Any rancher, farmer, or political subdivision within a designated drought-distressed area that experiences an inadequate supply of water as a result of ASA(CW)-declared drought is eligible for assistance at Federal expense. Ranchers/farmers must realize at least one-third of their gross annual income from agricultural sources to qualify for assistance. Water for livestock is not eligible under these provisions. The Corps will respond only after a written request from the Governor or his/her authorized representative. Before Corps assistance is considered, other applicable Federal assistance authorities must be evaluated.

# **EMERGENCY MANAGEMENT** (Continued)

#### ADVANCE MEASURES

Advance measures consist of temporary emergency actions undertaken prior to flooding to prevent loss of life and damages to improved property and applies only to the protection of a flood control facility. Before the Corps can consider advance measures, there must be a threat of flooding that will cause damages if action is not taken immediately. The threat must be established by National Weather Service predictions or by Corps determinations of unusual flooding from adverse conditions. Federally funded emergency assistance under this authority will be considered when requested by the Governor of a State. This assistance is to complement the maximum efforts of State and local authorities and must be economically feasible.

#### **AUTHORITY**

Public Law 99, 84th Congress, as amended (Flood and Coastal Storm Emergencies Act)

OTHER THAN FLOOD EMERGENCIES: These activities include independent emergency actions to provide necessary assistance under urgent conditions in the absence of specific statutory authority. Any assistance provided is supplemental to the maximum efforts of State and local interests. The assistance is available only to save human life, prevent immediate human suffering, or mitigate major property damage or destruction. The Corps is authorized to use its own personnel, equipment, and supplies in serious emergencies or disasters.

#### **AUTHORITY**

Army Regulation AR 500-60, Disaster Relief

For additional information about the Emergency Management Program, please contact Jack Rose, Chief, Readiness Branch, at (402) 221-4148.

#### SUPPORT FOR OTHERS

<u>PURPOSE</u>: To perform work funded by non-Department of Defense (non-DoD) Federal agencies, by State and/or local governments of the United States, or by Indian Tribes.

<u>DESCRIPTION</u>: The Support for Others Program provides the Corps with opportunities to serve the Nation and enhance its capability to accomplish its assigned missions. Any work performed must be consistent with Corps organizational purposes and capability. Work varies from employing one or several of the Corps' skills to using the whole range of the Corps' planning, engineering, real estate, contracting, construction management, and legal skills. The Corps' capabilities include, but are not limited to, the following areas listed under Technical Areas of Expertise, mainly:

Hydrologic Engineering Geotechnical Engineering Design Engineering Planning Services

<u>LIMITATIONS</u>: Before the Corps can support State and local governments, the requesting government must certify that it cannot obtain the services reasonably and expeditiously from private firms. The technical services that may be provided include studies and planning activities, engineering and design (including plans and specifications), construction management assistance, and training. Construction management assistance is limited to technical advice to improve State or local management capability in contract preparation, negotiation, and evaluation; contract administration; quality assurance; and supervision and inspection. The Corps may not acquire real estate or be the construction contracting officer for a State or local government.

<u>COST</u>: All Corps costs must be provided by the customer agency. Under the program, the customer retains responsibility for program planning, development, and budgeting.

<u>AUTHORITY</u>: Economy Act (31 U.S.C. 1535), 10 U.S.C. 3036(d), and the Intergovernmental Cooperation Act (31 U.S.C. 6505).

For additional information or to request assistance under this program, please contact Bill Mulligan, Chief, Civil Works Branch, at (402) 221-7184.

#### TECHNICAL AREAS OF EXPERTISE

The Omaha District has exceptional technical capability in all areas of the Civil Works program. The following pages briefly describe the technical expertise available within the District in the following fields:

Hydrologic Engineering Geotechnical Engineering Design Engineering Planning Services

#### HYDROLOGIC ENGINEERING

#### Watershed Modelling

Rainfall/Runoff Modelling GIS Applications Streamflow and Reservoir Routing Hypothetical Storm Evaluation Historical Storm Evaluation Continuous Streamflow Simulation Snowmelt Simulation and Analysis

#### Flood Control Design

Levees and Floodwalls
Reservoirs and Spillways
Conduit and Drainage Structures
Pumping Stations
River Channel Restoration
Diversion Structures
Flood Warning and Preparedness

#### River Environmental Restoration

Geomorphology Wetland Habitat Design Channel Chute Restoration

#### Flood Plain Management

Flood Boundary Determination
Floodway Analysis
Flood Hazard/Mitigation
Flood Insurance/FEMA Studies
Flood Plain Information Preparation
Flood Plain Management Planning
Nonstructural Flood Damage Reduction

#### Sediment/Erosion Design

Soil Erosion Rates Analysis Sediment Retention Structure Sizing Sediment Deposition and Scour Analysis Streambed Erosion Protection Design Drainage Structure Erosion Protection Dredge Plan Development Hydrographic Surveys

#### Emergency Flood Fighting

Flood Magnitude Forecasting Flood Timing Forecasting Emergency Flood Mitigation Design

#### TECHNICAL AREAS OF EXPERTISE

### HYDROLOGIC ENGINEERING (Continued)

#### Hydraulic Structure Design

Culverts
Inlet Control Structures
Energy Dissipation Structures
Stilling Basins
Reservoir Spillways and Outlet Works
Model and Prototype Testing

#### Water Control

Regulation of 27 Multipurpose Reservoirs Real Time Runoff Models Using GIS Forecasts of River Flows and Stages Hydro-Meteorological Data Collection Coordination of Reservoir Releases Development of Optimum Water Control Plans

#### Statistical Analysis

Flood Frequency Regression Analysis Monte-Carlo Simulation Stochastic Hydrology Mixed Population Analysis Risk and Uncertainty Analysis

#### Surface Water Quality Assessment

Limnological and Riverine Studies
Network Design Monitoring
Collection of Water Quality Samples
Evaluation of Water Quality Data
Water Quality Modelling
Assistance in TMDL Development





#### **GEOTECHNICAL ENGINEERING**

#### Geotechnical Design of Flood Control Projects

Earth Dam and Levee Design and Rehabilitation Slope Protection Design Slope Stability Investigation and Analysis Borrow Material Study and Analysis Channel Improvement Projects Bank Stabilization Environmental Restoration and Enhancement Feasibility/Cost Analysis Flood Mitigation for Emergency Actions



#### Dam Safety

Embankment and Foundation Evaluation Monitoring System Design, Inspections, and Structural Evaluation Underwater Inspections and Scour Evaluation Emergency Action Plan Development

#### Foundation Design

Building, Pavement, and Bridge Foundation Geotechnical Analyses Geotechnical Site Investigations and Analyses for Building Foundations, Pavements, Utilities, Hydraulic Structures, Bridges; and Special Structural Features Design, Specification, and Oversight of Subgrade Soil Improvement Methods Special Studies to Solve Unique Foundation, Subgrade, and Drainage Problems Foundation Design on Expansive Soils

#### Material Engineering

Repair/Rehab of Existing Structures Painting/Coating of Metallic Surfaces



#### TECHNICAL AREAS OF EXPERTISE

#### **DESIGN ENGINEERING**

#### Environmental Design

Domestic Water Systems Analysis Wastewater Systems Analysis Hazardous, Toxic, and Radioactive Remediation Tech Support for Contract O&M Drinking Water Systems

#### Structural Design

2 and 3-Dimensional Frame Analysis
Stability and Sliding Analysis
Concrete, Steel, and Wood Design
Wind, Seismic, and Hydrodynamic Analysis
Bridge Design
Bridge Inspection
Bridge Rating Analysis

#### Mechanical Design

Hydroelectric Turbine Analysis Hydroelectric Power Tunnels Flood Control Gates Pumping Stations HVAC and HVAC Controls Fire Protection Systems

#### Site Planning and Civil Design

Community Master Planning
Landscape Development Plans
Land Management Plans
Wetlands Mitigation
Natural Resources Planning
Recreational Facilities (campgrounds,
hiking and biking trails, playgrounds)

#### Architectural and Interior Design

Space Planning
Historic Preservation and Renovation
Green Building Design
Charettes and Customer Surveys
Wall and Floor Finishes/Coverings
Furniture Selection, Placement, and Layout
Color Selection and Coordination

#### Electrical Design

Hydroelectric Equipment and Systems Exterior Electrical Distribution Interior Electrical Distribution Camping Facilities Protective Relaying Communications Systems



#### PLANNING SERVICES

#### Environmental Planning and Compliance

**BRAC EIS's** 

Natural Resources Management

Fish and Wildlife Plans

Forest Management Plans

Aquatic Ecosystem Assessments

Environmental Impact Statements (EIS's)

Wetlands Functions/Values Studies

Mitigation Planning

**Environmental Baseline Surveys** 

Threatened/Endangered Species Surveys/Studies

Monitoring Plans

Plant Biodiversity Studies

**Biological Assessments** 

**Environmental Assessments** 

NEPA/Environmental Compliance

Land/Resource Management Plans

**Endangered Species Act** 

**Ecological Risk Assessments** 

Fish/Wildlife Surveys/Inventories

#### Flood Damage Prevention

**Project Definition** 

Flood Frequency and Flooded Area Definition

Flood Damage Assessment

Alternative Identification and Analysis

Cooperative Projects with Transportation Agencies Risk and Uncertainty Evaluations

**Economic Sizing and Optimization** 

#### Economic and Financial Analysis

Financial Analyses

**Cost Allocation Studies** 

**Economic Impact Studies** 

Life-Cycle Cost/Benefit Analyses

Privatization Studies for Base Facilities

#### General Planning

Resource Planning

**Public Involvement** 

**Population Projections** 

**Multiagency Coordination** 

**Recreation Master Planning** 

#### Ecosystem Restoration

Riverine/Wetland Restoration Definition

Terrestrial Habitat Restoration Definition

**Ecosystem Project Design** 

Alternative Identification/Cost Analysis

Partnerships with Local Sponsors

#### Cultural Resources

NAGPRA Compliance and Consultation

Archeological Surveys

**Cultural Resources Mitigation** 

Historic Properties Management Plans

**National Register Evaluations** 

Historic American Buildings (HABS)

Scopes of Work and Contract Management

for Cultural Resources Studies



# RECENT CIVIL WORKS PROJECTS WITHIN THE OMAHA DISTRICT



Hamburg Flood Damage Reduction, Iowa Perry Creek Flood Damage Reduction, Iowa Sand Creek Watershed Restoration, Nebraska Yellowstone River Ice Jam Analysis, Montana Crow Creek Flood Damage Reduction, Wyoming Yellowstone River Cumulative Impacts, Montana Nathan's Lake Ecosystem Restoration, Nebraska Boyer Chute Ecosystem Restoration, Nebraska

South Platte River Ecosystem Restoration, Colorado
Lower Platte River Nonstructural Analysis, Nebraska
Antelope Creek Flood Damage Reduction, Nebraska
Wood River Flood Damage Reduction, Nebraska
Pender Flood Damage Reduction, Nebraska
James River Water Control Manual Update, North and South Dakota
Howells Flood Damage Reduction, Nebraska
Denison Flood Damage Reduction, Iowa
Pierre-Fort Pierre Nonstructural Flood Mitigation, South Dakota
Upper Mississippi River Frequency Analysis



# RECENT CIVIL WORKS PROJECTS WITHIN THE OMAHA DISTRICT (Continued)

Niobrara and Missouri River Sediment Recon Study, South Dakota and Nebraska

Denver County Reconnaissance Study, Colorado

Highway 12 Road Raise/Relocation, Nebraska

Big Sioux River Flood Damage Reduction, South Dakota

Missouri River Fish and Wildlife Mitigation, Nebraska and Iowa

Missouri National Recreational River (MNRR), Nebraska and South Dakota

Cultural Resources—White Swan Area, South Dakota

Cherry Creek Dam Safety Analysis, Colorado

Restoration of Abandoned Mine Sites, Montana

Beulah Flood Damage Reduction, North Dakota

Mandan Flood Damage Reduction, North Dakota

Kingfisher Point Ecosystem Restoration, Colorado

Hulett Flood Plain Information, Wyoming

Elkhorn River Flood Plain Information, Nebraska

Sand Hills Hydrology Study, Nebraska

West Papillion Creek Hydrologic and Hydraulic Analyses, Phase 2, Nebraska

Sioux City Master Drainage Plan, Iowa

Lincoln Flood Plain Ordinance Revisions, Nebraska

Boyer River Hydrologic and Hydraulic Analyses, Iowa

Miles City Flood Damage Reduction, Montana

MNRR Pre-dredging Elutriate Study, Nebraska

MNRR Turbidity Study, Nebraska and South Dakota

Glendive Flood Damage Reduction, Montana



# Omaha District Civil Works Boundary



